

## ABSTRACT

A focused ultrasound ablation device includes an ultrasound emitting member having a plurality of individual ultrasound emitting elements arranged in an array. The ultrasound emitting elements are actuatable to emit ultrasound energy and focus the emitted ultrasound energy a predetermined distance from the ultrasound emitting member such that the ultrasound energy is focused within anatomical tissue adjacent which the ultrasound emitting member is positioned. The anatomical tissue is heated by the ultrasound energy focused therein to form an internal lesion within the tissue. The ultrasound emitting elements are selectively, independently actuatable, allowing selected ones of the ultrasound emitting elements to be actuated to emit ultrasound energy to obtain a lesion of desired or selected size and/or surface configuration in the tissue of a particular patient. A method of thermal ablation comprises the steps of selecting selected ones of a plurality of ultrasound emitting elements, arranged in an array on an ultrasound emitting member, for actuation to emit ultrasound energy in accordance with a desired size and/or configuration of a lesion to be formed in anatomical tissue of a patient, positioning the ultrasound emitting member adjacent the tissue, actuating the selected ones of the ultrasound emitting elements, focusing the ultrasound energy with the selected ones of the ultrasound emitting elements so that the ultrasound energy is focused within the tissue, and heating the tissue with the focused ultrasound energy to form a lesion within the tissue having the desired size and/or configuration.